Sodium Chlorite DP No. 494855



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

MEMORANDUM

DATE:

December 7, 2016

SUBJECT:

Sodium Chlorite: Discussion Regarding the Presence of Chlorite Residues from

the Application of FruitgardTM to Tomatoes and Cantaloupes.

PC Code: 030090 Decision No.: 514590

Petition No.: NA

Risk Assessment Type: NA TXR No.: NA

MRID No.: 49458503, 49458504, 49458505, 49458506, 49458507

DP Barcode: D494855 **Registration No.:** 79814-5

Regulatory Action: Section 3 Registration

Case No.: NA CAS No.: 7758-19-2 40 CFR: \$180.1070

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FROM:

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Risk Assessment Branch III Health Effects Division (7509P)

THROUGH: Kristin Rickard, Senior Biologist

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TO:

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I. ACTION REQUESTED

ICA Trinova LLC. has submitted a request to add new uses on tomatoes and cucurbits to the FruitgardTM product label (EPA Reg. No. 79814-5). This product contains 3.2% sodium chlorite and produces chlorine dioxide (via fumigation) for post-harvest control of micro-organisms of public health interest. HED has previously reviewed data to determine residues of chlorate and perchlorate following application of this product (D431751, S. Bose-Biswas, March 2016). Because chlorite was not discussed in that document, the Antimicrobials Division (AD) has requested an additional memorandum to discuss chlorite residues following the treatment of the proposed commodities.

II. CONCLUSIONS

HED has examined the submitted residue chemistry studies for chlorite and concludes that residues of chlorite are unlikely to be present following application/fumigation of FruitgardTM and, therefore, exposure to chlorite is not expected based on this use pattern. Based on that, no change to the existing tolerance exemption level is required and HED has no objections to the proposed new uses.

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III. DETAILED CONSIDERATIONS

Multiple studies were submitted to the Agency in conjunction with this action and were previously reviewed. HED has re-examined the fate and metabolism of chlorite (36 ClO₂-) studies for both tomato (MRID 4945804) and cantaloupe (MRID 49458505). In each study, the composition of radioactive residues was determined using ion chromatography in conjunction with liquid scintillation counting (LSC) of trapped metabolite fractions. For both tomatoes and cantaloupes, no detectable residues (based on applied radioactivity) of sodium 36 Cl-chlorite were detected in tomatoes (flesh/puree) or cantaloupes (rind, rinse water) following fumigation.